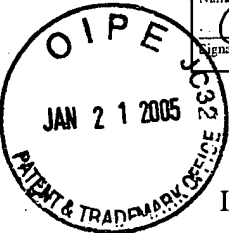


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Caroline Wei-Berk 45,203

Name of Attorney Registration No.

Signature of Attorney *Caroline Wei-Berk*



P&G Case 8325

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of :  
Deak et al. : Confirmation No. 1137  
Serial No. 09/849,555 : Group Art Unit 1751  
Filed May 4, 2001 : Examiner Preeti Kumar

For Method for the use of Aqueous Vapor and Lipophilic Fluid During Fabric Cleaning

BRIEF ON APPEAL

Mail Stop Appeal Brief – Patents  
Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Enclosed, pursuant to 37 C.F.R. 1.192(a), is Appellant's brief on Appeal for the above application. The Brief is being forwarded in triplicate.

The fee for this Brief on Appeal is \$340.00 37 CFR 1.17(c).

The Director is hereby authorized to charge the above fee, or any additional fees that may be required, or credit any overpayment to Deposit Account No. 16-2480 in the name of The Procter & Gamble Company. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

By *Caroline Wei-Berk*  
Caroline Wei-Berk  
Attorney or Agent for Applicant(s)  
Registration No. 45,203  
(513) 627-0352

Date: January 18, 2005

Customer No. 27752

(BriefonAppealTrans.doc)  
(Last Revised 3/30/2004)



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CAROLINE WEI-BERK 45,203  
Name of Attorney/Agent Registration No.  
*Caroline Wei Berk*  
Signature of Attorney/Agent

Case 8325

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application No. : 09/849,555  
Appellant(s) : Deak et al.  
Filed : May 4, 2001  
Title : Method for the use of Aqueous Vapor and Lipophilic Fluid  
During Fabric Cleaning  
TC/A.U. : 1751  
Examiner : Preeti Kumar  
Conf. No. : 1137  
Docket No. : 8325  
Customer No. : 27752

**APPEAL BRIEF**

Commissioner for Patents  
**Mail Stop Appeal Brief -Patents**  
P. O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir,

This is Appellants' Brief relating to an appeal from the November 15, 2004 Final Rejection in the above-identified application. The Notice of Appeal was submitted on November 15, 2004 and was noted as received by the USPTO on the same date via an Auto-Reply confirmation. The Appeal Brief is due on January 15, 2005, which falls on a Saturday. The following Monday, January 17, 2005, is a federal holiday. Thus, this Appeal Brief filed on January 18, 2005 is timely.

This Appellant's Brief is being filed in triplicate.

## **I. REAL PARTY IN INTEREST**

The real party in interest is Procter & Gamble Company of Cincinnati, Ohio, by virtue of the Assignment recorded on June 18, 2001, at Reel 011902, Frame 0261.

## **II. RELATED APPEALS AND INTERFERENCES**

There are no related appeals or interferences known to the Appellant, or known to Appellant's undersigned legal representative.

## **III. STATUS OF CLAIMS**

Claims 1-43 are pending and have been appealed in the Notice of Appeal faxed on November 15, 2004. Appellants' hereby withdraw Claims 33-43 from Appeal. A complete copy of the appealed claims 1-32 is set forth in the Appendix.

## **IV. STATUS OF AMENDMENTS**

All amendments presented in the case have been entered.

## **V. SUMMARY OF INVENTION**

The present invention relates to a fabric treating process which employs two media – a limited amount of water in an aqueous vapor form and a lipophilic fluid - for delivering improved fabric cleaning benefit. Additionally, the process of the present invention can provide wrinkle reduction, wrinkle removal and/or perfuming benefits as well.

Typically, the lipophilic fluid is used in a non-aqueous (i.e., dry) cleaning process in order to avoid water damages to the fabrics. The lipophilic fluids are capable of removing hydrophobic stains from fabrics but are less satisfactory in removing hydrophilic or combination stains from fabrics. By including an aqueous vapor treating step, the process of the present invention improves the stain removal performance of the dry cleaning process while limiting the water damages that are common in an aqueous cleaning process.

In one specific embodiment of the present invention, the fabric cleaning process comprises the steps of:

- a. applying an aqueous vapor to said fabrics, in an amount at least about 0.5% but less than or equal to about 50% by weight of said fabrics;
- b. applying a lipophilic fluid to said fabrics; and
- c. extracting at least a portion of said lipophilic fluid.

## **VI. ISSUES**

- (1) Whether the fabric cleaning process of the present invention is anticipated by U.S. Patent 6,063,135 (Berndt et al.)?
- (2) Whether the fabric cleaning process of the present invention is non-obvious and patentable over U.S. Patent 6,063,135 (Berndt et al.) in view of U.S. Patent 5,940,988 (Eisen)?
- (3) Whether the fabric cleaning process of the present invention is non-obvious and patentable over U.S. Patent 6,057,240 (Madore et al.) in view of U.S. Patent 5,940,988 (Eisen)?

## **VII. GROUPING OF CLAIMS**

Claims 1-3, 10-24 and 29-33 stand or fall together.

Claims 4-9 and 26-28 should be considered separately, because none of the references teach or suggest a process of applying a lipophilic fluid and a controlled amount of aqueous vapor to fabrics wherein the aqueous vapor is applied in pulses or has specific droplet sizes.

Claim 25 should be considered separately because none of the references teach or suggest a process of applying a lipophilic fluid and a controlled amount of aqueous vapor to fabrics wherein the aqueous vapor comprises cold steam.

Claims 34-43 are withdrawn from Appeal.

## **VIII. ARGUMENTS**

(1) Whether the fabric cleaning process of the present invention is anticipated by U.S. Patent 6,063,135 (Berndt et al.)?

### **1A. Examiner's Position**

Claims 1-3, 10-24 and 29-43 are rejected under 35 USC 102(a) as being anticipated by Berndt et al. (US 6,063,135). Berndt et al. teach a dry cleaning system and process which use a

specific solvent derived from an organic/inorganic hybrid (organo silicone), in combination with organic and/or organo-silicone-based detergent which is specifically tailored for working in conjunction with the solvent to afford optimal cleaning (See Berndt et al. Col. 3, lines 9-15). Specifically, with respect to the step of applying an aqueous vapor, the Examiner asserted that

“Berndt et al. teach that the garments are tumbled in the basket in the vapor-laden air heated to a temperature between 110 and 170 Fahrenheit. See col. 8, ln. 55-56. Specifically the aqueous vapor is applied to the fabrics since Berndt et al. teach the use of pressurized steam to heat the air inside the basket through the use of a circulating fan. See col. 8, ln. 60.”

FINAL OFFICE ACTION at page 4, second paragraph.

#### 1B. Appellants' Position

Appellants' respectfully traverse the above rejection because Examiner erred that Berndt et al. teach applying an aqueous vapor to the garment in the drying step. Appellants will point to various teachings in Berndt et al. which support Appellants' position that Berndt et al. are silent on applying an aqueous vapor to the garment in any step of their cleaning process.

First, as the Examiner has correctly stated that Berndt et al. teach

“During the cleaning cycle, the solvent and the detergent mixture (if used) is pumped out of the basket through a “button trap” and then across a filter to remove the particulate and impurities from [sic] the mixture. At times a choice of a “batch” solvent flow may be used wherein the mixture may not be exposed to the filter system, but be pumped from the button trap directly back to the basket. See col. 8, ln. 25-35.”

FINAL OFFICE ACTION at page 4, first paragraph.

Appellants respectfully point out that Berndt et al. do not disclose any water or water vapor being used or added to the mixture in the cleaning cycle, therefore, the washing step is free of any water and water vapor. Further, Appellants' position is supported by the disclosure of Berndt et al. which states

“[t]he use of these additives, namely detergents and suspending agents, allows the solvent to perform a total garment cleaning process.” (emphasis added) (See col.8, lines 20-23).

Since solvent and/or solvent mixture is used for the total cleaning process, no water or water vapor is present in the cleaning step, the “vapor” in the vapor-laden air in the heating step must refer to the solvent vapor or solvent mixture vapor. Appellants' position is further supported by the disclosure of Berndt et al. which states

“[d]uring this heating cycle, the solvent mixture is vaporized and carried by circulating air to a refrigerated condensing coil that condenses the vapors to a liquid . . .” (emphasis added) (See col.8, line 66- col. 9, line 2).

Second, Appellants submit that Berndt et al. merely teach a drying step that uses pressurized steam in a coil to heat the air inside the basket, and uses a circulating fan to circulate air thereby distribute heat throughout the basket. Contrary to Examiner’s assertion, the pressurized steam is not applying to or even comes into contact with the garment. Appellants’ position is supported by the disclosure of Berndt et al. which states

“ . . . heating is accomplished by passing pressurized steam through a coil that heats up the air inside the basket through the use of a circulating fan.” (emphasis added) (see Col. 8, lines 59-61).

A fair reading of this disclosure would lead one of ordinary skill in the art to conclude that the pressurized steam is contained in a heating coil and air heated by said heating coil circulates inside the basket to dry the garments. In such a system, steam is not applied to the garments inside the basket.

Third, Section 2131 of the MPEP states: “TO ANTICIPATE A CLAIM, THE REFERENCE MUST TEACH EVERY ELEMENT OF THE CLAIM” (emphasis in original). Clearly Berndt et al. does not teach applying the claimed amount of aqueous vapor ranging from about 0.5% to about 50% by weight of the fabrics to the fabrics.

Based on the foregoing, Appellants submit that this rejection based on erroneous readings of Berndt et al. should be reversed. Furthermore, Appellants submit that since Berndt et al. do not teach the present invention of applying a lipophilic fluid and a controlled amount of water vapor to fabrics, Claims 1-3, 10-24 and 29-43 are not anticipated by and are patentable over Berndt et al. under 35 U.S.C. § 102.

(2) Whether the fabric cleaning process of the present invention is non-obvious and patentable over Berndt et al. in view of U.S. Patent 5,940,988 (Eisen)?

## 2A. Examiner’s Position

Claims 4-9 and 25-28 are rejected under 35 USC 103(a) as being unpatentable over Berndt et al (US 6,063,135) in view of Eisen (US 5,940,988). Eisen teaches a method for dry cleaning garments including the steps of: placing clothes in a rotatable drum of a dry cleaner,

supplying a chemical in liquid or gas form to the drum to remove odors from the clothes in the pressurized drum, pressurizing the air in the drum to clean the clothes therein, supplying water or water vapor to the clothe in the pressurized drum, supplying chemical fabric conditioner to condition the clothes in the pressurized drum, and evacuate air and filter our fine particulate matter from the pressurized drum (See Eisen, col. 4, line 60 to col. 5 line 2). Examiner acknowledged that Berndt et al. do not teach the pulses or the droplet sizes of the aqueous vapor, nor the use of cold steam (FINAL OFFICE ACTION at page 5, fifth paragraph). Examiner nevertheless asserted that

“it would have been obvious to one of ordinary skill in the art to modify the teaching of Berndt et al. and pulse the aqueous vapor having the droplet size as recited in the instant claims, since Eisen suggests adding water vapor to the garments for increasing the moisture content of the fabric while controlling how much water vapor is supplied to the fabric garments in the drum and Berndt et al. suggest applying aqueous vapor to fabric through a circulating fan in general.” (FINAL OFFICE ACTION at page 7, first full paragraph).

**2B. Appellants’ Position with respect to Claims 4-9 and 26-28**

Appellants’ respectfully traverse the above rejection.

Appellants respectfully point out that Examiner erred in asserting that Berndt et al. teach applying an aqueous vapor to the garment in the process. As discussed above in Section 1B, Berndt et al. teach that the pressurized steam is contained in a heating coil, thus, the pressurized steam is not applied to the garments inside the basket, and the vapor inside the basket refers not to water vapor but to the solvent and/or solvent mixture vapor.

Appellants further point out that Eisen teaches an improved dry cleaning process that avoids all the cost, safety and regulatory issues associated with dry cleaning solvents by not using dry cleaning solvents at all. (See Eisen col. 1-2 and col. 10-11). Rather, Eisen teaches a multi-step cleaning and conditioning process using various environmentally safe liquids and gases, including pressurized air or gases, treatment solutions (such as baking soda solution, carbonic acid solution), water or water vapor, and fabric conditioning solutions. (See Eisen col. 9-10).

The Federal Circuit held that it is hindsight reasoning when prior art references are combined without evidence of a suggestion, teaching, or motivation and the inventor’s disclosure is taken as the roadmap for piecing together the prior art references to defeat patentability. *See*

*e.g.*, Ruiz v. A. B. Chance Co., 357 F.3d 1270, 1275 (Fed. Cir. 2004); In re Dembiczak, 175 F.3d 994, 999 (Fed. Cir. 1999). Since Berndt et al. teach a process using specific dry cleaning solvents and Eisen teaches a cleaning/conditioning process that avoids dry cleaning solvents, there is no motivation in the cited references to combine a dry cleaning solvent-based process with a specific step of a nil dry cleaning solvent process. Appellants submit that Examiner has relied on improper hindsight to pick and choose from various teachings of the references to combine the references without any evidence of a teaching, suggestion or motivation in the references.

The Federal Circuit also held that the mere fact that the prior art may be modified does not make the modification obvious unless the prior art suggests the desirability of the modification. See *In re Fritch*, 972 F.2d 1260, 23 USPQ 2d 1780 (Fed. Cir. 1992).

There is no motivation in Berndt et al. to modify its teachings to apply an aqueous vapor to the garment, and further, to apply the aqueous vapor in a pulsing mode or with specific droplet sizes. Moreover, the motivation and desirability with respect to the allegedly obvious modifications, such as pulsing the aqueous vapor application step and applying aqueous vapor having the claimed droplet size, are clearly absent since both references are completely silent on these modifications.

Based on the foregoing, Appellants submit that this rejection is based on modifications that are not taught, suggested or motivated by the cited references. Therefore, this rejection should be reversed. Appellants further submit that Claims 4-9 and 26-28 are unobvious and patentable over Berndt et al. in view of Eisen under 35 U.S.C. § 103.

## 2C. Appellants' Position with respect to Claim 25

Examiner rejected Claim 25 for the same reasons cited in Section 2A above, though Examiner had correctly acknowledged that Berndt et al. do not teach the use of cold steam (FINAL OFFICE ACTION at page 5, fifth paragraph).

Appellants submit that Berndt et al. teach a process using specific dry cleaning solvents and Eisen teaches a cleaning/conditioning process that avoids dry cleaning solvents, there is no motivation in the cited references to combine a dry cleaning solvent-based process with a specific step of a non-solvent based process. Appellants submit that Examiner has relied on improper hindsight to pick and choose from various teaching of the references to combine the



references without any evidence of a suggestion, teaching, or motivation in the prior art references.

Furthermore, even if the references may be combined, both references are silent regarding applying a cold steam to the fabrics. Thus, there is no teaching, suggestion or motivation to so modify the primary reference.

Based on the foregoing, Appellants submit that this rejection is based on modifications that are not taught, suggested or motivated by the cited references, therefore, this rejection should be reversed. Appellants further submit that Claim 25 is unobvious and patentable over Berndt et al. in view of Eisen under 35 U.S.C. § 103.

(3) Whether the fabric cleaning process of the present invention is non-obvious and patentable over U.S. Patent 6,057,240 (Madore et al.) in view of Eisen?

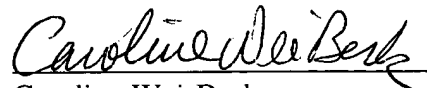
Claims at issue have been withdrawn from Appeal.

#### **IX. SUMMARY**

In view of the foregoing remarks, Appellants respectfully submit that Claims 1-32 are allowable and that the rejections of Claims 1-32 are erroneous. Appellants respectfully request the Board's reversal of the rejections.

January 18, 2005  
Customer No. 27752

Respectfully submitted,  
For: Deak et al.



Caroline Wei-Berk  
Attorney for Appellants  
Reg. No. 45,203  
(513) 627-0352

APPENDIX

1. A method for cleaning fabrics within one apparatus comprising the steps of:
  - a. applying an aqueous vapor to said fabrics, in an amount at least about 0.5% but less than or equal to about 50% by weight of said fabrics;
  - b. applying a lipophilic fluid to said fabrics; and
  - c. extracting at least a portion of said lipophilic fluid.
2. The method of Claim 1 wherein said aqueous vapor is applied in an amount of at least about 5% by weight of said fabrics.
3. The method of Claim 1 wherein said aqueous vapor is applied in an amount of less than or equal to about 15% by weight of said fabrics.
4. The method of Claim 1 wherein said aqueous vapor is pulsed during said Step "a".
5. The method of Claim 4 wherein said pulse continues for at least about 5 seconds.
6. The method of Claim 4 wherein said pulse continues for at most about 30 seconds.
7. The method of Claim 4 wherein a time interval separates each of said pulses.
8. The method of Claim 7 wherein said time interval is at least about 2 seconds.
9. The method of Claim 7 wherein said time interval is at most about 20 seconds.
10. The method of Claim 1 wherein said Step "a" occurs after said Step "b".
11. The method of Claim 1 wherein said Step "a" occurs during or after said Step "c".
12. The method of Claim 1 wherein said Step "a" occurs after said Step "c".

13. The method of Claim 1 additionally comprising applying a surfactant to said fabrics.
14. The method of Claim 1 additionally comprising applying an emulsifier to said fabrics.
15. The method of Claim 1 wherein said lipophilic fluid comprises a member selected from the group consisting of a linear siloxane, a cyclic siloxane, and mixtures thereof.
16. The method of Claim 1 wherein said lipophilic fluid comprises a lipophilic fluid selected from the group consisting of octamethylcyclotetrasiloxane, decamethylcyclopentasiloxane, dodecamethylcyclohexasiloxane, and mixtures thereof.
17. The method of Claim 1 wherein said lipophilic fluid comprises decamethylcyclopentasiloxane.
18. The method of Claim 1 wherein said lipophilic fluid comprises an emulsifier.
19. The method of Claim 1 wherein said lipophilic fluid comprises a surfactant.
20. The method of Claim 1 wherein said lipophilic fluid is at a temperature from about 10°C to about 100°C.
21. The method of Claim 1 wherein said aqueous vapor comprises an emulsifier.
22. The method of Claim 1 wherein said aqueous vapor comprises a surfactant.
23. The method of Claim 1 wherein said aqueous vapor is at a temperature from about 10°C to about 120°C.
24. The method of Claim 1 wherein said aqueous vapor comprises wet steam.

25. The method of Claim 1 wherein said aqueous vapor comprises cold steam.
26. The method of Claim 1 wherein said aqueous vapor comprises droplets of less than about 1 millimeter in size.
27. The method of Claim 1 wherein said aqueous vapor comprises droplets of less than about 250 microns in size.
28. The method of Claim 1 wherein said aqueous vapor comprises droplets of less than about 100 microns in size.
29. The method of Claim 1 wherein the entire method occurs within a cleaning chamber.
30. A method according to Claim 1 wherein said extracting comprises spinning said fabrics and said lipophilic fluid.
31. A method according to Claim 1 wherein said extracting comprises wringing said fabrics.
32. A method according to Claim 1 wherein said extracting comprises evaporating at least a portion of said lipophilic fluid.

**LIST OF REFERENCES**

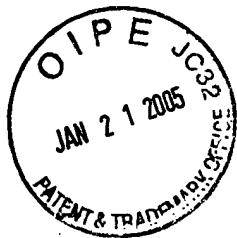
1	US 6,063,135	<i>Berndt et al.</i>
2	US 5,940,988	<i>Eisen</i>

**LIST OF AUTHORITIES**

Ruiz v. A. B. Chance Co., 357 F.3d 1270 (Fed. Cir. 2004)

In re Dembiczak, 175 F.3d 994 (Fed. Cir. 1999)

In re Fritch, 972 F.2d 1260, 23 USPQ 2d 1780 (Fed. Cir. 1992)



LEXSEE 972 F.2D 1260

IN RE JOHN R. FRITCH

91-1318

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

972 F.2d 1260; 1992 U.S. App. LEXIS 18470; 23 U.S.P.Q.2D (BNA) 1780; 92  
Daily Journal DAR 11427

August 11, 1992, Decided

**PRIOR HISTORY:** **[\*\*1]** Appealed from: U.S. Patent and Trademark Office Board of Patent Appeals and Interferences

**DISPOSITION:** REVERSED

**LexisNexis(R) Headnotes**

**COUNSEL:** Charles L. Gholz, Oblon, Spivak, McClelland, Maier, et al, of Arlington, Virginia, argued for appellant. John R. Fritch, of Corpus Christi, Texas, was on the brief.

Jameson Lee, Associate Solicitor, Office of the Solicitor, of Arlington, Virginia, argued for appellee. With him on the brief was Fred E. McKelvey, Solicitor. Of counsel was Richard E. Schafer.

**JUDGES:** Before PLAGER, Circuit Judge, SMITH, Senior Circuit Judge, and RADER, Circuit Judge.

**OPINIONBY:** SMITH

**OPINION:**

[\*1261] SMITH, Senior Circuit Judge.

John R. Fritch (Fritch) appeals the 27 February 1991 decision of the Patent and Trademark Office Board of Patent Appeals and Interferences (Board) affirming-in-part the Examiner's final rejection of the remaining claims in Fritch's application entitled Landscape Edging Apparatus and Method. n1 The Examiner concluded that Fritch's invention would have been obvious to one of ordinary skill in the art and was therefore unpatentable

under 35 U.S.C. § 103. The Board, except for allowing claim 28, agreed. The Board's decision is reversed.

n1 Serial No. 06/838,721.

**[\*\*2]**

*Issue*

The issue is whether the Board erred in affirming the Examiner's determination that the prior art references of Wilson and Hendrix rendered the subject matter of Fritch's independent claims 1, 13, 24, and 29 obvious to one of ordinary skill in the art.

*Background*

In his final rejection, the Examiner rejected claims 1-24 and 27-30 of Fritch's application as unpatentable for obviousness under 35 U.S.C. § 103. Fritch appealed the final rejection to the Board. The Board affirmed the rejection as to claims 1-24, 29 and 30, entered a new ground of rejection for claim 27, and reversed as to claim 28. The Board agreed with the Examiner that the teachings of the Wilson and Hendrix patents rendered the subject matter of independent claims 1, 13, 24, and 29 obvious to one of ordinary skill in the art. Fritch does not appeal the Board's disposition as to claims 27 and 28, and at oral argument withdrew the appeal as to claim 8. The claims remaining in this appeal are 1-7, 9-24, 29 and 30.

*The Fritch Invention*

The invention claimed by Fritch involves a landscape edging device which includes a planar base portion and an upwardly extending retainer portion. The base portion **[\*\*3]** is elongate, thin, flexible and has a

972 F.2d 1260, \*; 1992 U.S. App. LEXIS 18470, \*\*;  
23 U.S.P.Q.2D (BNA) 1780; 92 Daily Journal DAR 11427

planar bottom surface conformable to a varying slope ground surface. One longitudinal [\*1262] edge of the base portion serves as a mowing strip and the other serves as a retaining flange for landscape fill. The upwardly extending retainer portion is integrally connected (e.g., fused) to the base portion and defines a longitudinally extending enclosed space. The Fritch invention is intended to be used as a retainer for landscape fill in order to separate unmowable landscape fill from the mowable lawn. It may also be used to secure a landscaping sheet to the ground, or to function as guards at the base of a fence. Independent claims 1 and 13 on appeal are representative of the subject matter claimed:

1. A landscape edging strip formed in its entirety of a thin gauge, flexible material and conformable to a ground surface of varying slope, comprising a continuous elongate, thin gauge, flexible base portion having a planar bottom surface conformable to said varying slope ground surface; a thin gauge, elongate retainer portion integral with said base portion and extending upwardly therefrom and transversely thereover to overlie a portion of said base portion; [\*4] all of said retainer portion defining a longitudinally extending enclosed space; said retainer portion being integrally connected to said base portion adjacent one longitudinal edge of said base portion to define a mowing strip adjacent the other longitudinal edge of said base portion.

\* \* \* \*

13. A landscape edging strip formed in its entirety from thin gauge, flexible material and conformable to a ground surface of varying slope, comprising a continuous elongate, thin gauge, flexible base portion having a planar bottom surface conformable to said varying slope ground surface; a thin gauge, elongate retainer portion integral with said base portion and extending upwardly therefrom and transversely thereover to overlie a portion of said base portion; all of said retainer portion defining a longitudinally extending enclosed space; said retainer portion being integrally connected to said base portion at a transverse location between the longitudinal edges of said base portion, thereby defining a longitudinally extending retaining flange on one side of said retainer portion and a mowing strip on the other side of said retainer portion.

\* \* \* \*

The critical language in Fritch's independent [\*\*5] claims is that the device is to be, in its entirety, both flexible and "conformable to a ground surface of varying slope". These limitations, although located in the claims' preambles, "are necessary to give meaning to the

claim[s] and properly define the invention". n2 Figure 1 from Fritch's drawings is reproduced below:

[SEE FIG. 1 IN ORIGINAL]

n2 *Perkin Elmer Corp. v. Computervision Corp.*, 732 F.2d 888, 896, 221 USPQ 669, 675 (Fed. Cir. 1984).

[\*1263] *The Prior Art*

*a. The Wilson Patent*

The Wilson patent relied upon by the Examiner and the Board is entitled "Grass Edging and Watering Device". n3 The embodiment of the Wilson device includes a substantially flat mowing strip extending horizontally from a longitudinally extending body portion. Opposite the mowing strip is a scored flange which may be broken off when not needed or wanted. Between the mowing strip and the flange, and extending vertically from the body portion is an anchoring leg. Located above the anchoring leg is the [\*\*6] body portion which contains a water conduit and sprinkler head assembly. The device is intended to be used adjacent to the borders of walks and plant beds. Figures 1 and 4 from Wilson's drawings are reproduced below:

[SEE FIG. 1 IN ORIGINAL]

[SEE FIG. 4 IN ORIGINAL]

n3 U.S. Patent No. 3,485,449.

*b. The Hendrix Patent*

The Hendrix patent is entitled "Loose Material Retainer Strip". n4 The Solicitor chose not to discuss the Hendrix reference in his brief, stating that the Board had deemed Hendrix unnecessary to its decision. The Solicitor overstates the Board's position. The Board based its decision upon "a collective evaluation of the Wilson and Hendrix patents". We include Hendrix in our discussion because it did play a role in the rejection of Fritch's independent claims.

n4 U.S. Patent No. 4,349,596.

The Hendrix device is composed of elongated, [\*\*7] flexible strips having substantially C-shaped cross-section. The bottom lip of the device is to be wider than the top lip in order to facilitate fastening the device to the ground. The device will fit most gentle contours,



972 F.2d 1260, \*; 1992 U.S. App. LEXIS 18470, \*\*;  
23 U.S.P.Q.2D (BNA) 1780; 92 Daily Journal DAR 11427

and the top lip will yield laterally to build-up of gravel until the gravel can be redistributed. The concave portion of the strip is installed such that it faces the material to be retained in place. Hendrix contemplates that the retainer will be used in retaining gravel in driveways, lining flower beds, or on the shoulders of asphalt or concrete highways. Figure 1 of Hendrix's drawings is reproduced below:

[\*1264] [SEE FIG. 1 IN ORIGINAL]

#### *Standard of Review*

"Obviousness is a question of law to be determined from the facts." n5 The obviousness determination "is based upon underlying factual inquiries concerning the claimed invention and the prior art" which are reviewed for clear error. n6 However, it is the ultimate conclusion of obviousness which the Federal Circuit reviews as a matter of law. n7

n5 *In re De Blauwe*, 736 F.2d 699, 703, 222 USPQ 191, 195 (Fed. Cir. 1984). [\*\*8]

n6 *In re Kulling*, 897 F.2d 1147, 1149, 14 USPQ2d 1056, 1057 (Fed. Cir. 1990).

n7 *In re De Blauwe*, 736 F.2d at 703, 222 USPQ at 195.

#### *Teachings of Wilson*

Fritch takes exception to the Examiner's findings of fact related to the teachings of the Wilson patent. The Examiner's rejection and the Board's opinion rely heavily on the use of Wilson in view of other references to declare the Fritch invention obvious. The Board states that it agrees with the Examiner's finding of fact regarding the teachings of Wilson. In the Examiner's answer, which the Board quotes, the Wilson device is described as follows:

Wilson discloses a landscaping edging strip comprising a relatively thin gauge, elongated flexible base portion including a mower strip B having a planar bottom surface conformable to a varying slope surface.

The Board states that the Wilson reference presents "substantial evidence that Wilson is both thin and flexible." The Board regards the Wilson device as teaching that it is flexible and conformable in its entirety. This [\*\*9] finding demonstrates clear error.

It is well settled that a prior art reference is relevant for all that it teaches to those of ordinary skill in the art. n8 The base portion of Wilson is not planar in its [\*1265] entirety, as the Board's opinion suggests, but also includes a prominent anchoring leg to secure the device to the ground. The anchoring leg, which runs the length of the Wilson device, would inhibit longitudinal flexibility of the Wilson device. Indeed, Wilson expressly contemplates flexibility and conformability only in the mower strip. Wilson states that its mower strip may be lifted in order to pack dirt thereunder for the purpose of securing the device to the ground. Fritch, on the other hand, is claimed to be flexible in its entirety. The Board's holding that Wilson is flexible in its entirety is based upon a misapprehension of the scope of Wilson's teachings.

n8 *Beckman Instruments Inc. v. LKB Produkter AB*, 892 F.2d 1547, 1551, 13 USPQ2d 1301, 1304 (Fed. Cir. 1989).

Second, [\*\*10] Wilson's anchoring leg prohibits conformability to the ground surface in the manner claimed by Fritch. The Examiner's description of Wilson as having a "planar bottom surface conformable to a varying slope surface" is applicable only in reference to the mower strip. This description, however, ignores the anchor leg and the fact that it must be placed into the ground. Wilson expressly teaches that the anchoring leg may be pushed into soft soils, but in harder terrain a trench is needed in order to place the Wilson sprinkler system. In order to install the Wilson apparatus, the ground surface must be altered to conform to the device rather than, as the Solicitor contends, that Wilson is freely conformable to the ground. Fritch, on the other hand, does not require such extensive alteration of the ground surface in order to install the device.

#### *Prima Facie Obviousness*

In proceedings before the Patent and Trademark Office, the Examiner bears the burden of establishing a prima facie case of obviousness based upon the prior art. n9 "[The Examiner] can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary [\*\*11] skill in the art would lead that individual to combine the relevant teachings of the references." n10 The patent applicant may then attack the Examiner's prima facie determination as improperly made out, or the applicant may present objective evidence tending to support a conclusion of nonobviousness. n11

972 F.2d 1260, \*; 1992 U.S. App. LEXIS 18470, \*\*;  
23 U.S.P.Q.2D (BNA) 1780; 92 Daily Journal DAR 11427

n9 *In re Piasecki*, 745 F.2d 1468, 1471-72,  
223 USPQ 785, 787-88 (Fed. Cir. 1984).

n10 *In re Fine*, 837 F.2d 1071, 1074, 5  
USPQ2d 1596, 1598 (Fed. Cir. 1988) (citing *In  
re Lalu*, 747 F.2d 703, 705, 223 USPQ 1257,  
1258 (Fed. Cir. 1988)).

n11 *In re Heldt*, 58 C.C.P.A. 701, 433 F.2d  
808, 811, 167 USPQ 676, 678 (CCPA 1970).

Fritch has attacked the Board's finding that the Examiner established that Fritch's claimed invention was prima facie obvious in view of the teachings of the prior art. The Board states that "a collective evaluation of the Wilson and the Hendrix patents would have rendered the subject [\*\*12] matter of independent claims 1, 13, 24, and 29 obvious to one of ordinary skill." Fritch maintains that there is no teaching, suggestion, or incentive in the prior art to modify or to combine the teachings of the prior art in the manner suggested by the Examiner. We agree.

Wilson teaches a grass edging and watering device which includes an anchoring leg for securing the device to the ground. Wilson contemplates that a trench will need to be dug in order to allow the anchoring leg to be placed into the ground if the condition of the soil requires it. This anchoring leg prohibits flexibility and conformability over the length of Wilson. Any flexibility or conformability in Wilson, which the Board states extends to the entire device, is limited to the mower strip. It is only the mower strip that is mentioned as being flexible in order to aid installation. Hendrix has been cited for its teaching of a flexible retainer strip that is able to conform to the ground surface.

Wilson addresses the problems of arresting growth of grass between areas and watering plants without wetting sidewalks. Wilson lacks any suggestion or incentive to use its water conduit as a landscape retainer since this [\*\*13] would arguably result in clogged sprinkler heads. n12 Wilson also [\*1266] teaches that its mower strip is flexible in order to allow dirt to be packed thereunder. There is no suggestion in Wilson to extend that flexibility to the entire device. Wilson also lacks any teaching or suggestion that one should remove the anchoring leg. Hendrix does not, simply by virtue of its flexible nature, suggest these extensive changes which the Board states are obvious. Neither Wilson nor Hendrix, alone or in combination, provide any incentive to combine the teachings of the prior art in the manner maintained by the Board.

n12 This court has previously found a proposed modification inappropriate for an

obviousness inquiry when the modification rendered the prior art reference inoperable for its intended purpose. *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984).

-----End Footnotes-----  
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"Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching [\*\*14] or suggestion supporting the combination. Under section 103, teachings of references can be combined *only* if there is some suggestion or incentive to do so." n13 Although couched in terms of combining teachings found in the prior art, the same inquiry must be carried out in the context of a purported obvious "modification" of the prior art. The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. n14 Wilson and Hendrix fail to suggest any motivation for, or desirability of, the changes espoused by the Examiner and endorsed by the Board.

n13 *ACS Hosp. Systems, Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984).

n14 *In re Gordon*, 733 F.2d at 902, 221 USPQ at 1127.

Here, the Examiner relied upon hindsight to arrive at the determination of obviousness. It is impermissible to use [\*\*15] the claimed invention as an instruction manual or "template" to pieced together the teachings of the prior art so that the claimed invention is rendered obvious. n15 This court has previously stated that "one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention." n16

n15 *In re Gorman*, 933 F.2d 982, 987, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991). See also *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1138, 227 USPQ 543, 547 (Fed. Cir. 1985).

n16 *In re Fine*, 837 F.2d at 1075, 5 USPQ2d at 1600.

*Conclusion*

972 F.2d 1260, \*, 1992 U.S. App. LEXIS 18470, \*\*;  
23 U.S.P.Q.2D (BNA) 1780; 92 Daily Journal DAR 11427

The decision of the Board affirming the Examiner's rejection of independent claims 1, 13, 24, and 29 of Fritch's application as unpatentable over the prior art under 35 U.S.C. § 103 is reversed. Since dependent claims are nonobvious if the independent claims from which they depend are nonobvious, the Board's affirmance of the [\*\*16] rejection of dependent claims 2-7, 9-12, 14-23, and 30 is also reversed. n17

n17 *In re Fine*, 837 F.2d at 1076, 5 USPQ2d at 1600 (citing *Hartness Int'l, Inc. v. Simplimatic Eng'g Co.*, 819 F.2d 1100, 1108, 2 USPQ2d 1826, 1831 (Fed. Cir. 1987)). See also *In re Sernaker*, 702 F.2d 989, 991, 217 USPQ 1, 3 (Fed. Cir. 1983) (when argued together, dependent claims stand or fall with the independent claims from which they depend).

**REVERSED**

LEXSEE 357 F.3D 1270

**RICHARD RUIZ and FOUNDATION ANCHORING SYSTEMS, INC., Plaintiffs-  
Appellees, v. A.B. CHANCE COMPANY, Defendant-Appellant.**

03-1333

**UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT**

*357 F.3d 1270; 2004 U.S. App. LEXIS 1325; 69 U.S.P.Q.2D (BNA) 1686*

**January 29, 2004, Decided**

**PRIOR HISTORY:** **[\*\*1]** Appealed from: United States District Court for the Eastern District of Missouri. Judge Catherine D. Perry. *Ruiz v. A.B. Chance Co.*, 2003 U.S. Dist. LEXIS 24044 (E.D. Mo., Mar. 10, 2003)

**DISPOSITION:** Affirmed.

**LexisNexis(R) Headnotes**

**COUNSEL:** Matthew A. Rosenberg, Blumenfeld, Kaplan & Sandweiss, P.C., of St. Louis, Missouri, argued for plaintiffs-appellees.

John H. Quinn III, Armstrong Teasdale LLP, of St. Louis, Missouri, argued for defendant-appellant. With him on the brief was Andrew B. Mayfield.

**JUDGES:** Before NEWMAN, MICHEL, and RADER, Circuit Judges.

**OPINIONBY: RADER**

**OPINION:** **[\*1271]** RADER, Circuit Judge.

On remand from this court's decision in *Ruiz v. A.B. Chance Company*, 234 F.3d 654 (Fed. Cir. 2000), the United States District Court for the Eastern District of Missouri found defendant-appellant A.B. Chance Company's (Chance) patented underpinning system obvious under 35 U.S.C. § 103. Because the district court made no clear error in its factual determinations concerning the motivation to combine the prior art teachings and the merit **[\*1272]** of Chance's asserted secondary considerations, this court affirms.

I.

Since about 1970, Chance has manufactured screw anchors, also called helical piers, for use in supporting and stabilizing electrical transmission towers. Screw **[\*\*2]** anchors are elongated shafts with an earth-boring (screw) tip and a transversely extending load-bearing member. In 1988, Chance extended its expertise in stabilizing slumping structures into the residential and commercial building markets. Chance used screw anchors with a metal bracket to underpin these building foundations. The Chance underpinning method places the screw anchor adjacent to the footing and rotates the screw anchor to bore beneath the footing. When resistance to rotation of the screw anchor reaches a specified point, Chance attaches a metal bracket (designated as 30 in the Figure below) to the slouching foundation to transfer the building load onto the screw anchor. The United States Patent and Trademark Office issued U.S. Patent Nos. 5,139,368 and 5,171,107 to Chance in 1992 covering this screw anchor system. Figure 5 in the '107 patent shows the technology:

**GET DRAWING SHEET 1 OF 5**

Appellees Richard Ruiz and his company Foundation Anchoring Systems, Inc. (collectively "Ruiz") became distributors for Chance's underpinning system. During the early 1990s, Ruiz also formed various other anchoring companies and marketed systems that competed with the Chance system. **[\*\*3]** In February 1997, Chance terminated Ruiz's distributorship. Thereafter, Ruiz began marketing an underpinning **[\*1273]** system with screw anchors and metal brackets. This new system used components from other manufacturers. Ruiz filed suit against Chance in August of that same year alleging various non-patent claims, including discrimination, breach of contract, tortious interference with contract and business relations,

and breach of fiduciary duty of good faith and fair dealing. Ruiz also filed for a declaratory judgment that its new underpinning system does not infringe Chance's patents and that the patents are invalid. Chance filed a counterclaim for patent infringement.

The validity question focuses on several prior art references. During the late 1980s, Richard Fuller and Stan Rupiper used screw anchors for underpinning existing structural foundations. Fuller and Rupiper used a concrete haunch, not a metal bracket, to transfer the load of the foundation to the screw anchor (the "Fuller-Rupiper method"). Gregory's U.S. Patent Nos. 4,911,580 and 4,765,777 claim an apparatus and system for underpinning structural foundations using a push pier and a metal bracket. In the Gregory system, the [\*\*4] metal bracket transfers the foundation load to the push pier, which is driven into the ground to supply the necessary foundational support. The push pier relies on soil friction to supply that support. Figure 6 of the '580 patent shows this technology:

[SEE FIG. 6 IN ORIGINAL]

The scope of the claims in this case is not at issue in this appeal, because the parties agree that the claims are infringed or invalidated by the use of a screw anchor in conjunction with a metal bracket to underpin a foundation. Additional information [\*1274] concerning the claims and the other aspects of this case appear in this court's opinion in *Ruiz v. A.B. Chance Co.*, 234 F.3d 654 (Fed. Cir. 2000). Examination of the prior art shows that the Fuller-Rupiper method discloses the screw anchor component of the claims; the Gregory system discloses the metal bracket component in the claims. Thus, this appeal is properly focused on the motivation to combine those teachings, as well as any secondary considerations that might inform the obviousness analysis.

The district court granted summary judgment in favor of Chance on all of Ruiz's non-patent claims in April 1999. On the patent claims, the district [\*\*5] court held a Markman hearing to construe the claims and a bench trial to decide the issues of infringement and validity. At the time of trial, the scope of the case had narrowed to focus on claims 1-4 and 6-8 of the '368 patent and claims 1-4 and 6-8 of the '107 patent. After the trial, the district court entered its judgment from the bench that Ruiz's product infringes the patent claims to the tune of \$ 540,000 in damages. Nonetheless, the trial court determined that the claims are invalid under 35 U.S.C. § 103 in light of the Gregory patents and the Fuller-Rupiper method.

This court heard the appeal from that judgment and affirmed every holding of the district court except the finding of obviousness. In *Ruiz*, 234 F.3d at 660, this

court remanded the case to the district court for further examination of obviousness. This court issued the following instructions:

On remand, we instruct the district court to make specific Graham findings on: 1) the reason, suggestion, or motivation present in the prior art, in the knowledge of one of skill in the art, or in the problem of foundation settling which clearly and particularly would [\*\*6] lead one of ordinary skill in the art to combine screw anchors with metal brackets; 2) the level of ordinary skill in the art; and 3) whether, and to what extent, evidence of secondary consideration, such as commercial success, long felt but unresolved need, failure of others, copying, and unexpected results, is probative in the obviousness analysis.

*Id.*

The district court invited additional briefing and oral argument on the remand issues. Having reconsidered the evidence of the case, the district court again found the relevant claims invalid as obvious and issued an opinion outlining its factual findings according to this court's instructions. Of particular significance, the district court found the motivation to combine the teachings of the Gregory patents and the Fuller-Rupiper method in the nature of the problem of underpinning foundations itself, explaining:

The Rupiper method and the Gregory patent can be combined in either of two ways to reach the same result as the method covered by the patents in issue here: by replacing the concrete haunch of the Rupiper method with the bracket of the Gregory patent, or by replacing the straight piling of the [\*\*7] Gregory patent with the screw anchor of the Rupiper method. The evidence in this case showed that there was reason, suggestion or motivation to make these combinations. . . . The problem is the same: how to underpin an unstable foundation of an existing building.

The district court also discounted Chance's proffered objective evidence of commercial success and skepticism of experts as weak. Specifically, the district court found that the alleged skepticism of Chance's system by Rupiper was merely an acknowledgement that Rupiper's concrete haunch worked better than a metal bracket in seismic areas, such as California. [\*1275] The record indeed does not show that Rupiper doubted that Chance's system would work in general. In addition, the district court attributed Chance's commercial success to its background and experience in screw anchors rather than any inventive features of the screw anchor-metal bracket system as a whole.

Chance now appeals again, arguing that the district court, as it did in its original judgment, employed hindsight to find obviousness. Specifically, this appeal involves two challenges to the district court's obviousness determination: 1) whether the district court clearly erred in finding an implied motivation to combine the prior art teachings in the nature of the problem of underpinning existing foundations, and 2) whether the district court clearly erred in discounting Chance's evidence of secondary considerations. Jurisdiction over this appeal is proper under 28 U.S.C. § 1295.

## II.

*Section 103 of title 35 of the United States Code* states:

A patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

35 U.S.C. § 103(a)(2000).

In making the assessment of differences, *section 103* specifically requires consideration of the claimed invention "as a whole." Inventions typically are new combinations of existing principles or features. *Env'tl. Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 698 (Fed. Cir. 1983) (noting that "virtually all [inventions] are combinations of old elements."). The "as a whole" instruction [\*9] in title 35 prevents evaluation of the invention part by part. Without this important requirement, an obviousness assessment might break an invention into its component parts (A + B + C), then find a prior art reference containing A, another containing B,

and another containing C, and on that basis alone declare the invention obvious. This form of hindsight reasoning, using the invention as a roadmap to find its prior art components, would discount the value of combining various existing features or principles in a new way to achieve a new result - often the very definition of invention.

*Section 103* precludes this hindsight discounting of the value of new combinations by requiring assessment of the invention as a whole. This court has provided further assurance of an "as a whole" assessment of the invention under § 103 by requiring a showing that an artisan of ordinary skill in the art at the time of invention, confronted by the same problems as the inventor and with no knowledge of the claimed invention, would select the various elements from the prior art and combine them in the claimed manner. In other words, the examiner or court must show some suggestion or motivation, before [\*10] the invention itself, to make the new combination. See *In re Rouffet*, 149 F.3d 1350, 1355- 56 (Fed. Cir. 1998).

While the ultimate determination of obviousness is a legal conclusion reviewed by this court without deference, that determination always entails various factual findings that this court reviews for clear error following a bench trial. See *Weatherchem Corp. v. J.L. Clark, Inc.*, 163 F.3d 1326, 1332 (Fed. Cir. 1998). The clear error standard permits reversal only when this court is left with a "definite and firm conviction" that the district court was in error. *Amhil Enters. Ltd. v. Wawa, Inc.*, 81 F.3d 1554, 1562 (Fed. Cir. 1996).

[\*1276] This case deals with a challenge to the district court's conclusion on two of the underlying factual determinations in its obviousness analysis. Accordingly, this court will review for clear error the district court's conclusions regarding objective, secondary considerations, see *Pro-Mold v. Great Lakes Plastics*, 75 F.3d 1568, 1572 (Fed. Cir. 1996), and whether a motivation to combine the teachings in the prior art references was shown, see *Winner Int'l Royalty Corp. v. Wang*, 202 F.3d 1340, 1348 (Fed. Cir. 2000). [\*11]

The district court in this case presided over a bench trial and reconsidered the evidence on remand. Chance's principal argument is that the district court clearly erred in finding a motivation to combine the teachings in the Gregory patents with the Fuller- Rupiper method. Chance cites this court's precedent that warns district courts about the risk of hindsight reconstruction to find an invention obvious where the invention at issue involves relatively simple technology. See *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351 (Fed. Cir. 2001). Accordingly, Chance argues that the district court

utilized hindsight to find that a person of ordinary skill would have been motivated to combine the prior art teachings.

To the contrary, the record in this case supports the trial court's findings. While this court indeed warns against employing hindsight, its counsel is just that - a warning. That warning does not provide a rule of law that an express, written motivation to combine must appear in prior art references before a finding of obviousness. Stated differently, this court has consistently stated that a court or examiner may find a motivation to combine prior [\*\*12] art references in the nature of the problem to be solved. See *Pro-Mold*, 75 F.3d at 1573; *Display Techs., Inc. v. Paul Flum Ideas, Inc.*, 282 F.3d 1340, 1346-47, 60 Fed. Appx. 787 (Fed. Cir. 2002); *In re Huang*, 100 F.3d 135, 139 n.5 (Fed. Cir. 1996). This form of motivation to combine evidence is particularly relevant with simpler mechanical technologies.

This record shows that the district court did not use hindsight in its obviousness analysis, but properly found a motivation to combine because the two references address precisely the same problem of underpinning existing structural foundations. Moreover the record supports the district court's factual finding that Fuller's and Rupiper's work showed that screw anchors worked better than straight push piers. In fact, the evidence shows that Rupiper introduced Chance to the use of screw anchors in underpinning building foundations. Chance then added a metal bracket to the screw anchor.

The record also supports the district court's conclusion that artisans knew that a foundation underpinning system requires a means of connecting the foundation to the load-bearing member. The Gregory patents teach the [\*\*13] use of a metal bracket to connect a foundation to a straight pier, and testimony at trial showed that the need for a connecting element was widely known. Thus, the district court could properly conclude on this record, without being clearly in error, that a person of ordinary skill would be led to combine the screw anchor in the Fuller-Rupiper method with the metal bracket in the Gregory system to underpin an existing building foundation.

This record, it is true, does not feature an express written teaching in the art to make this combination. On this record, however, that is not fatal to the district court's obviousness determination. As noted earlier, this court has repeatedly stated that the motivation to combine the teachings in the prior art may "come from [\*\*1277] the nature of a problem to be solved, leading inventors to look to references relating to possible solutions to that problem." *Pro-Mold*, 75 F.3d at 1573. The district court in this case applied that settled law.

The district court, sitting as a finder of fact, weighed the evidence and found that, because the prior art references address the narrow problem of underpinning existing building foundations, a person [\*\*14] seeking to solve that exact same problem would consult the references and apply their teachings together. Thus the district court's conclusion is perfectly legitimate when the evidence supports it, as it does here.

Chance's argument amounts to little more than its own alternative view of the evidence. While the record does contain some evidence against the district court's finding, such evidence is not overwhelming by any means. In addition, the district court in this case did not simply discount all contrary evidence and bolster a meager amount of evidence to reach a preformed conclusion. In fact, the district court discounted and discredited some testimony that actually supported its ultimate conclusion. For instance, the trial court dismissed the testimony of Robert Jones, a Chance distributor, that he would have made the combination. The district court declined to credit Mr. Jones' testimony because he exhibited far more than an ordinary level of skill in this art. The trial court's careful consideration of Mr. Jones' evidence shows further that it performed a detailed and reasoned analysis of the evidence, rather than a conclusion-oriented discussion that typically accompanies [\*\*15] a hindsight analysis. In short, the record in this case does not approach the evidence necessary to leave this court with a firm conviction that the district court committed clear error in its factual finding of a motivation to combine the Fuller- Rupiper and Gregory teachings.

Finally, the record also supports the district court's discounting of Chance's evidence of secondary considerations. The record supports the trial court's finding that any commercial success was not due to Chance's alleged unique combination, but rather due to Chance's experience with screw anchors combined with being the first large screw anchor manufacturer to enter the underpinning market. The district court did not clearly err in reaching this conclusion, nor in concluding that the evidence of skepticism was weak.

### III.

Based on the above analysis, this court holds that the district court did not clearly err in finding a motivation to combine the prior art references in the nature of the problem at issue. In addition, this court holds that the district court did not clearly err in discounting Chance's evidence of secondary considerations. Accordingly, this court affirms the judgment of the district court. [\*\*16]

### COSTS

Each party shall bear its own costs.

357 F.3d 1270, \*; 2004 U.S. App. LEXIS 1325, \*\*;  
69 U.S.P.Q.2D (BNA) 1686

AFFIRMED



LEXSEE 175 F.3D 994

IN RE ANITA DEMBICZAK and BENSON ZINBARG, Appellants.

98-1498

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

175 F.3d 994; 1999 U.S. App. LEXIS 8109; 50 U.S.P.Q.2D (BNA) 1614

April 28, 1999, Decided

**PRIOR HISTORY:** **[\*\*1]** Appealed from: Patent and Trademark Office Board of Patent Appeals and Interferences. (Serial No. 08/427,732).

**DISPOSITION:** REVERSED.

**LexisNexis (TM) HEADNOTES - Core Concepts:**

**COUNSEL:** David P. Gordon, of Stamford, Connecticut, argued for appellant. Of counsel was Thomas A. Gallagher, of Stamford, Connecticut.

John M. Whealan, Associate Solicitor, Office of the Solicitor, of Arlington, Virginia, argued for appellee. With him on the brief were ~~Albin~~ F. Drost, Acting Solicitor, and David R. Nicholson, Associate Solicitor.

**JUDGES:** Before MAYER, Chief Judge, MICHEL and CLEVINGER, Circuit Judges.

**OPINIONBY:** CLEVINGER

**OPINION:** **[\*996]** CLEVINGER, Circuit Judge.

Anita Dembiczak and Benson Zinbarg appeal the rejection, upheld by the Board of Patent Appeals and Interferences, of all pending claims in their Application No. 08/427,732. See *Ex Parte Dembiczak*, No. 96-2648, slip op. at 43 (May 14, 1998). Because the Board erred in sustaining rejections of the pending claims as obvious under 35 U.S.C. § 103(a) (Supp. 1998), and for obviousness-type double patenting, we reverse.

## I

The invention at issue in this case is, generally speaking, a large trash bag made of orange plastic and decorated with lines and facial features, allowing the

bag, when filled **[\*\*2]** with trash or leaves, to resemble a Halloween-style pumpkin, or jack-o'-lantern. As the inventors, Anita Dembiczak and Benson Zinbarg (collectively, "Dembiczak") note, the invention solves the long-standing problem of unsightly trash bags placed on the curbs of America, and, by fortuitous happenstance, allows users to express their whimsical or festive nature while properly storing garbage, leaves, or other household debris awaiting collection. Embodiments of the invention--sold under a variety of names, including Giant Stuff-A-Pumpkin TM, Funkins, Jack Sak TM, and Bag-O-Fun TM--have undisputedly been well-received by consumers, who bought more than seven million units in 1990 alone. Indeed, in 1990, the popularity of the pumpkin bags engendered a rash of thefts around Houston, Texas, leading some owners to resort to preventative measures, such as greasing the bags with petroleum jelly and tying them to trees. See R. Piller, "Halloween Hopes Die on the Vine," *Hous. Chron.*, Oct. 19, 1990, at 13A.

The road to profits has proved much easier than the path to patentability, however. In July 1989, Dembiczak filed a utility patent application generally directed to the pumpkin bags. **[\*\*3]** In a February 1992 appeal, the Board of Patent Appeals and Interferences ("the Board") reversed the Examiner's rejection, but entered new grounds for rejection. Dembiczak elected to continue prosecution, filing a continuation application to address the new grounds for rejection. Thereafter, the invention made a second appearance before the Board, in April 1993, when the Board both sustained the Examiner's rejection and again entered new grounds for rejection. Again, a continuation application was filed (the instant application). And again the Examiner's rejection was appealed to the Board, which sustained the rejection in a May 14, 1998, decision. See *Dembiczak*, slip op. at 43.

A

The patent application at issue includes claims directed to various embodiments of [\*997] the pumpkin bag. Claims 37, 49, 51, 52, 58 through 64, 66 through 69, and 72 through 81 are at issue in this appeal. Though the claims vary, independent claim 74 is perhaps most representative:

74. A decorative bag for use by a user with trash filling material, the bag simulating the general outer appearance of an outer surface of a pumpkin having facial indicia thereon, comprising:

a flexible waterproof plastic [\*\*4] trash or leaf bag having

an outer surface which is premanufactured orange in color for the user to simulate the general appearance of the outer skin of a pumpkin, and having

facial indicia including at least two of an eye, a nose and a mouth on the orange color outer surface for forming a face pattern on said orange color outer surface to simulate the general outer appearance of a decorative pumpkin with a face thereon,

said trash or leaf bag having first and second opposite ends, at least said second end having an opening extending substantially across the full width of said trash or leaf bag for receiving the trash filling material,

wherein when said trash or leaf bag is filled with trash filling material and closed, said trash or leaf bag takes the form and general appearance of a pumpkin with a face thereon.

All of the independent claims on appeal, namely 37, 52, 72, and 74, contain limitations that the bag must be "premanufactured orange in color," have "facial indicia," have openings suitable for filling with trash material, and that when filled, the bag must have a generally rounded appearance, like a pumpkin. Independent claims 37, 52, and 72 add the [\*\*5] limitation that the bag's height must at least 36 inches. Claim 72 requires that the bag be made of a "weatherproof material," and claim 74, as shown above, requires that the bag be "waterproof." Claim 52 recites a "method of assembling" a bag with the general characteristics of apparatus claim 37.

B

The prior art cited by the Board includes:

(1) pages 24-25 of a book entitled "A Handbook for Teachers of Elementary Art," by Holiday Art Activities ("Holiday"), describing how to teach children to make a "Crepe Paper Jack-O-Lantern" out of a strip of orange crepe paper, construction paper cut-outs in the shape of facial features, and "wadded newspapers" as filling;

(2) page 73 of a book entitled "The Everything Book for Teachers of Young Children," by Martha Shapiro and Valerie Indenbaum ("Shapiro"), describing a method of making a "paper bag pumpkin" by stuffing a bag with newspapers, painting it orange, and then painting on facial features with black paint;

(3) U.S. Patent No. 3,349,991 to Leonard Kessler, entitled "Flexible Container" ("Kessler"), describing a bag apparatus wherein the bag closure is accomplished by the use of folds or gussets in the bag material;

(4) [\*\*6] U.S. Patent No. Des. 310,023, issued August 21, 1990 to Dembiczak ("Dembiczak '023"), a design patent depicting a bag with a jack-o'-lantern face;

(5) U.S. Patent No. Des. 317,254, issued June 4, 1991 to Dembiczak ("Dembiczak '254"), a design patent depicting a bag with a jack-o'-lantern face; and,

(6) Prior art "conventional" plastic lawn or trash bags ("the conventional trash bags").

Using this art, the Board affirmed the Examiner's final rejection of all the independent claims (37, 52, 72, 74) under 35 U.S.C. § 103, [\*998] holding that they would have been obvious in light of the conventional trash bags in view of the Holiday and Shapiro references. The Board determined that, in its view of the prior art, "the only difference between the invention presently defined in the independent claims on appeal and the orange plastic trash bags of the prior art and the use of such bags resides in the application of the facial indicia to the outer

surface of the bag." Dembiczak, slip op. at 18. The Board further held that the missing facial indicia elements were provided by the Holiday and Shapiro references' description of painting jack-o'-lantern faces on paper bags. See [\*\*7] id. at 18-19. Dependent claims 49 and 79, which include a "gussets" limitation, were considered obvious under similar reasoning, except that the references cited against them included Kessler. See id. at 7.

The Board also affirmed the Examiner's obviousness-type double patenting rejection of all the independent claims in light of the two Dembiczak design patents ('023 and '254) and Holiday. See id. at 12. The Board held that the design patents depict a generally rounded bag with jack-o'-lantern facial indicia, and that the Holiday reference supplies the missing limitations, such as the "thin, flexible material" of manufacture, the orange color, the initially-open upper end, and the trash filling material. The Board also stated that the various limitations of the dependent claims--e.g., color, the inclusion of leaves as stuffing, and the dimensions--would all be obvious variations of the depictions in the Dembiczak design patents. See id. at 8-9. In addition, using a two-way test for obviousness-type double patenting, the Board held that the claims of the Dembiczak design patents "do not exclude" the additional structural limitations of the pending utility claims, [\*\*8] and thus the design patents were merely obvious variations of the subject matter disclosed in the utility claims. See id. at 11. The Board further upheld, on similar grounds and with the inclusion of the Kessler reference, the obviousness-type double patenting rejection of dependent claim 49. See id. at 12.

This appeal followed, vesting this court with jurisdiction pursuant to 28 U.S.C. § 1295(a)(4)(A) (1994).

## II

A claimed invention is unpatentable if the differences between it and the prior art "are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art." 35 U.S.C. § 103(a) (Supp. 1998); see *Graham v. John Deere Co.*, 383 U.S. 1, 14, 148 U.S.P.Q. (BNA) 459, 465, 15 L. Ed. 2d 545, 86 S. Ct. 684 (1966). The ultimate determination of whether an invention is or is not obvious is a legal conclusion based on underlying factual inquiries including: (1) the scope and content of the prior art; (2) the level of ordinary skill in the prior art; (3) the differences between the claimed invention and the prior art; and (4) objective evidence of nonobviousness. See *Graham*, 383 U.S. at 17-18, 148 U.S.P.Q. (BNA) [\*\*9] at 467; *Miles Labs, Inc., Inc. v. Shandon Inc.*, 997 F.2d 870, 877, 27 U.S.P.Q.2D (BNA)

1123, 1128 (Fed. Cir. 1993). We therefore review the ultimate determination of obviousness without deference to the Board, while examining any factual findings for clear error. See, e.g., *In re Zurko*, 142 F.3d 1447, 1459, 46 U.S.P.Q.2D (BNA) 1691, 1700 (Fed. Cir.) (en banc), cert. granted, 119 S. Ct. 401 (1998).

## A

Our analysis begins in the text of section 103 quoted above, with the phrase "at the time the invention was made." For it is this phrase that guards against entry into the "tempting but forbidden zone of hindsight," see *Loctite Corp. v. Ultraseal Ltd.*, 781 F.2d 861, 873, 228 U.S.P.Q. (BNA) 90, 98 (Fed. Cir. 1985), overruled on other grounds by *Nobelpharma AB v. Implant Innovations, Inc.*, 141 F.3d 1059, 46 U.S.P.Q.2D (BNA) 1097 [\*\*999] (Fed. Cir. 1998), when analyzing the patentability of claims pursuant to that section. Measuring a claimed invention against the standard established by section 103 requires the oft-difficult but critical step of casting the mind back to the time of invention; to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted [\*\*10] wisdom in the field. See, e.g., *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 U.S.P.Q. (BNA) 303, 313 (Fed. Cir. 1983). Close adherence to this methodology is especially important in the case of less technologically complex inventions, where the very ease with which the invention can be understood may prompt one "to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher." Id.

Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references. See, e.g., *C.R. Bard, Inc. v. M3 Sys., Inc.*, 157 F.3d 1340, 1352, 48 U.S.P.Q.2D (BNA) 1225, 1232 (Fed. Cir. 1998) (describing "teaching or suggestion or motivation [to combine]" as an "essential evidentiary component of an obviousness holding"); *In re Rouffet*, 149 F.3d 1350, 1359, 47 U.S.P.Q.2D (BNA) 1453, 1459 (Fed. Cir. 1998) ("the Board must identify specifically . . . the reasons one of ordinary skill in the art would have been motivated to select [\*\*11] the references and combine them"); *In re Fritch*, 972 F.2d 1260, 1265, 23 U.S.P.Q.2D (BNA) 1780, 1783 (Fed. Cir. 1992) (examiner can satisfy burden of obviousness in light of combination "only by showing some objective teaching [leading to the combination]"); *In re Fine*, 837 F.2d 1071, 1075, 5 U.S.P.Q.2D (BNA) 1596, 1600 (Fed. Cir. 1988) (evidence of teaching or suggestion "essential" to avoid hindsight); *Ashland Oil, Inc. v. Delta Resins &*

*Refractories, Inc.*, 776 F.2d 281, 297, 227 U.S.P.Q. (BNA) 657, 667 (Fed. Cir. 1985) (district court's conclusion of obviousness was error when it "did not elucidate any factual teachings, suggestions or incentives from this prior art that showed the propriety of combination"). See also *Graham*, 383 U.S. at 18, 148 U.S.P.Q. (BNA) at 467 ("strict observance" of factual predicates to obviousness conclusion required). Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability--the essence of hindsight. See, e.g., *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1138, 227 U.S.P.Q. (BNA) 543, 547 (Fed. Cir. 1985) ("The invention [\*\*12] must be viewed not with the blueprint drawn by the inventor, but in the state of the art that existed at the time."). In this case, the Board fell into the hindsight trap.

We have noted that evidence of a suggestion, teaching, or motivation to combine may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, from the nature of the problem to be solved, see *Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc.*, 75 F.3d 1568, 1573, 37 U.S.P.Q.2D (BNA) 1626, 1630 (Fed. Cir. 1996), *Par Ordnance Mfg. v. SGS Imports Intern., Inc.*, 73 F.3d 1085, 1088, 37 U.S.P.Q.2D (BNA) 1237, 1240 (Fed. Cir. 1995), although "the suggestion more often comes from the teachings of the pertinent references," *Rouffet*, 149 F.3d at 1355, 47 U.S.P.Q.2D (BNA) at 1456. The range of sources available, however, does not diminish the requirement for actual evidence. That is, the showing must be clear and particular. See, e.g., *C.R. Bard*, 157 F.3d 1340 at 1352, 48 U.S.P.Q.2D (BNA) at 1232. Broad conclusory statements regarding the teaching of multiple references, standing alone, are not "evidence." E.g., *McElmurry v. Arkansas Power & Light Co.*, 995 F.2d 1576, 1578, 27 U.S.P.Q.2D (BNA) [\*\*13] 1129, 1131 (Fed. Cir. 1993) ("Mere denials and conclusory statements, however, are not sufficient to establish a genuine issue of [\*1000] material fact."); *In re Sichert*, 566 F.2d 1154, 1164, 196 U.S.P.Q. (BNA) 209, 217 (CCPA 1977) ("The examiner's conclusory statement that the specification does not teach the best mode of using the invention is unaccompanied by evidence or reasoning and is entirely inadequate to support the rejection."). In addition to demonstrating the propriety of an obviousness analysis, particular factual findings regarding the suggestion, teaching, or motivation to combine serve a number of important purposes, including: (1) clear explication of the position adopted by the Examiner and the Board; (2) identification of the factual disputes, if any, between the applicant and the Board; and (3) facilitation of review on appeal. Here, however, the Board did not make particular findings

regarding the locus of the suggestion, teaching, or motivation to combine the prior art references.

All the obviousness rejections affirmed by the Board resulted from a combination of prior art references, e.g., the conventional trash or yard bags, and the Holiday and Shapiro publications teaching [\*\*14] the construction of decorated paper bags. See Dembiczak, slip op. at 6-7. To justify this combination, the Board simply stated that "the Holiday and Shapiro references would have suggested the application of . . . facial indicia to the prior art plastic trash bags." Id. at 18-19. However, rather than pointing to specific information in Holiday or Shapiro that suggest the combination with the conventional bags, the Board instead described in detail the similarities between the Holiday and Shapiro references and the claimed invention, noting that one reference or the other--in combination with each other and the conventional trash bags--described all of the limitations of the pending claims. See id. at 18-28. Nowhere does the Board particularly identify any suggestion, teaching, or motivation to combine the children's art references (Holiday and Shapiro) with the conventional trash or lawn bag references, nor does the Board make specific--or even inferential--findings concerning the identification of the relevant art, the level of ordinary skill in the art, the nature of the problem to be solved, or any other factual findings that might serve to support a proper obviousness [\*\*15] analysis. See, e.g., *Pro-Mold & Tool*, 75 F.3d at 1573, 37 U.S.P.Q.2D (BNA) at 1630.

To the contrary, the obviousness analysis in the Board's decision is limited to a discussion of the ways that the multiple prior art references can be combined to read on the claimed invention. For example, the Board finds that the Holiday bag reference depicts a "premanufactured orange" bag material, see Dembiczak, slip op. at 21, finds that Shapiro teaches the use of paper bags in various sizes, including "large", see id. at 22-23, and concludes that the substitution of orange plastic for the crepe paper of Holiday and the paper bags of Shapiro would be an obvious design choice, see id. at 24. Yet this reference-by-reference, limitation-by-limitation analysis fails to demonstrate how the Holiday and Shapiro references teach or suggest their combination with the conventional trash or lawn bags to yield the claimed invention. See *Rouffet*, 149 F.3d at 1357, 47 U.S.P.Q.2D (BNA) at 1459 (noting Board's failure to explain, when analyzing the prior art, "what specific understanding or technical principle . . . would have suggested the combination"). Because we do not discern any finding by [\*\*16] the Board that there was a suggestion, teaching, or motivation to combine the prior art references cited against the pending claims, the Board's conclusion of obviousness, as a matter of law, cannot stand. See *C.R. Bard*, 157 F.3d at 1352, 48 U.S.P.Q.2D (BNA) at 1232;

175 F.3d 994, \*, 1999 U.S. App. LEXIS 8109, \*\*;  
50 U.S.P.Q.2D (BNA) 1614

*Rouffet*, 149 F.3d at 1359, 47 U.S.P.Q.2D (BNA) at 1459; *Fritch*, 972 F.2d at 1265, 23 U.S.P.Q.2D (BNA) at 1783; *Fine*, 837 F.2d at 1075, 5 U.S.P.Q.2D (BNA) at 1600; *Ashland Oil*, 776 F.2d at 297, 227 U.S.P.Q. (BNA) at 667.

## B

The Commissioner of Patents and Trademarks ("Commissioner") attempts to justify the Board's decision on grounds [\*1001] different from that relied upon by the Board, arguing that one of ordinary skill in the art would have been motivated to combine the references. Of course, in order to do so, the Commissioner must do what the Board did not do below: make specific findings of fact regarding the level of skill in the art ("a designer and manufacturer of trash and leaf bags, particularly one specializing in the ornamental and graphic design of such bags"), Resp't Br. at 14, the relationship between the fields of conventional trash bags and children's crafts, respectively ("the artisan would also have been well aware of the ancillary, [\*17] corollary, and atypical uses of 'trash' bags such as their application in hobby and art projects"), Resp't Br. at 15, and the particular features of the prior art references that would motivate one of ordinary skill in a particular art to select elements disclosed in references from a wholly different field ("a designer and manufacturer of trash and leaf bags would have recognized the paper bag in Shapiro to be a trash bag and therefore would have been motivated to combine it with the admitted prior art plastic trash and leaf bags to arrive at the claimed invention"), Resp't Br. at 15. The Commissioner also appears to cite additional references in support of his obviousness analysis, noting that at least two design patents (in the record but not cited against the presently pending claims) teach the placement of "graphical information, including text, designs, and even facial indicia, to colored bags." Resp't Br. at 16. This new analysis, apparently cut from whole cloth in view of appeal, does little more than highlight the shortcomings of the decision below, and we decline to consider it. See, e.g., *In re Robertson*, 1999 U.S. App. LEXIS 3224, 169 F.3d 743, 746, [\*18] 49 U.S.P.Q.2D (BNA) 1949, 1951 (Fed. Cir. 1999) ("We decline to consider [the Commissioner's] newly-minted theory as an alternative ground for upholding the agency's decision."); *In re Soni*, 54 F.3d 746, 751, 34 U.S.P.Q.2D (BNA) 1684, 1688 (Fed. Cir. 1995); *In re Hounsfeld*, 699 F.2d 1320, 1324, 216 U.S.P.Q. (BNA) 1045, 1049 (Fed. Cir. 1983) (rejecting an "attempt[ ] by the Commissioner 'to apply a new rationale to support the rejection.'"); see also 35 U.S.C. § 144 (1994) (an appeal to the Federal Circuit "is taken on the record before The Patent and Trademark Office"). Because the Board has not established a prima facie case of obviousness, see *In re Bell*, 991 F.2d 781,

783, 26 U.S.P.Q.2D (BNA) 1529, 1531 (Fed. Cir. 1993) ("The PTO bears the burden of establishing a case of prima facie obviousness."), we therefore reverse the obviousness rejections, and have no need to address the parties' arguments with respect to secondary factors.

## III

Dembiczak also asks this court to reverse the Board's rejection of the pending claims for obviousness-type double patenting, which is a judicially-created doctrine that seeks to prevent the applicant from expanding the grant of the patent right beyond the [\*19] limits prescribed in Title 35. See, e.g., *In re Braat*, 937 F.2d 589, 592, 19 U.S.P.Q.2D (BNA) 1289, 1291-92 (Fed. Cir. 1991); *In re Longi*, 759 F.2d 887, 892, 225 U.S.P.Q. (BNA) 645, 648 (Fed. Cir. 1985). See also 35 U.S.C. § 154(a)(2) (Supp. 1998) (discussing patent term). The doctrine prohibits claims in a second patent which define "merely an obvious variation" of an invention claimed by the same inventor in an earlier patent. *Braat*, 937 F.2d at 592, 19 U.S.P.Q.2D (BNA) at 1292 (quoting *In re Vogel*, 57 C.C.P.A. 920, 422 F.2d 438, 441, 164 U.S.P.Q. (BNA) 619, 622 (CCPA 1970)). Thus, unless a claim sought in the later patent is patentably distinct from the claims in an earlier patent, the claim must be rejected. See *In re Goodman*, 11 F.3d 1046, 1052, 29 U.S.P.Q.2D (BNA) 2010, 2015 (Fed. Cir. 1993); *Vogel*, 422 F.2d at 441, 164 U.S.P.Q. (BNA) at 622. This question is one of law, which we review de novo. See *Goodman*, 11 F.3d at 1052, 29 U.S.P.Q.2D (BNA) at 2015; *Texas Instruments Inc. v. United States Int'l Trade Comm'n*, 988 F.2d 1165, 1179, 26 U.S.P.Q.2D (BNA) 1018, 1029 (Fed. Cir. 1993).

## [\*1002] A

The law provides that, in some very rare cases, obvious-type double patenting may be found between design and utility patents. [\*20] See *Carman Indus., Inc. v. Wahl*, 724 F.2d 932, 939-40, 220 U.S.P.Q. (BNA) 481, 487 (Fed. Cir. 1983) (noting that, while theoretically possible, "double patenting is rare in the context of utility versus design patents"); *In re Thorington*, 57 C.C.P.A. 759, 418 F.2d 528, 536-37, 163 U.S.P.Q. (BNA) 644, 650 (CCPA 1969) (Double patenting between a design and utility patent is possible "if the features producing the novel aesthetic effect of a design patent or application are the same as those recited in the claims of a utility patent or application as producing a novel structure."); *In re Phelan*, 40 C.C.P.A. 1023, 205 F.2d 183, 98 U.S.P.Q. (BNA) 156 (CCPA 1953); *In re Barber*, 23 C.C.P.A. 834, 81 F.2d 231, 28 U.S.P.Q. (BNA) 187 (CCPA 1936); *In re Hargraves*, 19 C.C.P.A. 784, 53 F.2d 900, 11 U.S.P.Q. (BNA) 240 (CCPA 1931). In these cases, a "two-way" test is applicable. See *Carman*, 724 F.2d at 940, 220 U.S.P.Q.

(BNA) at 487. Under this test, the obviousness-type double patenting rejection is appropriate only if the claims of the two patents cross-read, meaning that "the test is whether the subject matter of the claims of the patent sought to be invalidated would have been obvious from the subject matter of the claims of the [\*\*21] other patent, and vice versa." *Id.*, 220 U.S.P.Q. (BNA) at 487. See also *Braat*, 937 F.2d at 593, 19 U.S.P.Q.2D (BNA) at 1292 (explaining two-way test).

## B

In making its double patenting rejection, the Board concluded that all but one of the pending claims of Dembiczak's utility application would have been merely an obvious variation of the claims of the earlier-issued design patents--the Dembiczak '023 and '254 references--in light of the Holiday reference. The remaining claim, dependent claim 49, was judged obvious in light of the combination of the Dembiczak design patents, Holiday, and the Kessler reference.

Acknowledging that the two-way test was required by *Carman*, 724 F.2d at 940, 220 U.S.P.Q. (BNA) at 487, the Board concluded that "the design claimed in each of appellants' design patents does not exclude the features pertaining to the construction and color of the bag, the use of a plastic material for making the bag, the size or thickness of the bag . . . or the use of various types of filling material . . . . The particular details of the facial indicia would have been a matter of design choice as evidenced by the Holiday handbook," and that therefore, in view of Holiday, the claims of the [\*\*22] design patents were obvious variants of the pending utility patent claims. See Dembiczak, slip op. at 11. We disagree. In order for a design to be unpatentable because of obviousness, there must first be a basic design reference in the prior art, the design characteristics of which are "basically the same as the claimed design." *In re Borden*, 90 F.3d 1570, 1574, 39 U.S.P.Q.2D (BNA) 1524, 1526 (Fed. Cir. 1996); *In re Rosen*, 673 F.2d 388, 391, 213 U.S.P.Q. (BNA) 347, 350 (CCPA 1982). The phrase "having facial indicia thereon" found in the claims of the pending utility application is not a design reference that is "basically the same as the claimed design." *Borden*, 90 F.3d at 1574, 39 U.S.P.Q.2D (BNA) at 1526. In fact, it describes precious little with respect to design characteristics. The Board's suggestion that the design details were simply "a matter of design choice" evinces a misapprehension of the subject matter of

design patents. E.g., *Carman*, 724 F.2d at 939 n.13, 220 U.S.P.Q. (BNA) at 486 n.13 ("Utility patents afford protection for the mechanical structure and function of an invention whereas design patent protection concerns the ornamental or aesthetic features of a design.") Indeed, we note [\*\*23] that the two design patents at issue here--the Dembiczak '023 and '254 patents--were considered nonobvious over each other, and were even the subject of a restriction requirement. See 35 U.S.C. § 121 (1994) ("If two or more independent and distinct inventions are claimed in one [\*1003] application, the Commissioner may require the application to be restricted to one of the inventions."); 37 C.F.R. § 1.142. The position adopted by the Board--that a textual description of facial indicia found in the claims of the utility patent application makes obvious the specific designs claimed in the (patentably distinct) Dembiczak design patents--would presumably render obvious, or even anticipate, all design patents where a face was depicted on a bag. But this, of course, is not the law; the textual description cannot be said to be a reference "basically the same as the claimed design," of the design patents at issue here. *Borden*, 90 F.3d at 1574, 39 U.S.P.Q.2D (BNA) at 1526 (internal quotation marks omitted). The Board's conclusion of obviousness is incorrect.

Because we find that the Board erred in concluding that the design patents were obvious variants of the pending utility claims, we need not address [\*\*24] the other prong of the two-way double patenting test--whether the pending utility claims are obvious variations of the subject matter claimed in the design patents. See *Carman*, 724 F.2d at 939, 220 U.S.P.Q. (BNA) at 487 (both prongs of the two-way test required for obviousness-type double patenting). The double patenting rejections are reversed.

## IV

Because there is no evidence in the record of a suggestion, teaching, or motivation to combine the prior art references asserted against the pending claims, the obviousness rejections are reversed. In addition, because the Board misapprehended the test for obviousness-type double patenting, and because the pending utility claims do not render obvious the design patents, the double patenting rejections are also reversed.

## REVERSED